

ABSTRACT OF THE DISCLOSURE

Systems and methods are disclosed to effect a gamut conversion of source image data to a target image data set for rendering on a device with possibly a different gamut. One gamut conversion system comprises an input channel means, a gamma unit, a chroma/luma unit, a hue angle calculator, and a gamut conversion unit. The input channel means receives source image data. The gamma unit converts the source image data into perceptually uniform space data. The chroma/luma unit converts the perceptually uniform space data into a format comprising chroma and luma components. The hue angle calculator receives at least the chroma components from the chroma/luma unit and calculates hue angles for the source image data based on received components. The gamut conversion unit derives gamut conversion values to apply to the components of the source image data using a gamut conversion table.